

I bought a lawnmower last month, the kind you used to push around as a kid, the kind without gas. People assumed that I was either cheap (my dad's first reaction) or plain weird. Actually, the mower cost nearly as much as a gas-powered one, and isn't half as sturdy. It's got rickety aluminum handle bars and doesn't cut tough grass, which means I provide extra entertainment for my neighbors when I get out the giant hand-held hedge clippers and start clipping stalks scattered thoughout my lawn. I know what I must look like out there. I've known several people in my life whom I've thought were pretty eccentric, but, it's unsettling to think I might be viewed as "odd."

It's curious how we judge behavior. We preach, for example, to hungry South Americans the wisdom of sticking to their primitive way of life because it fits in quite nicely with the conservation of their environment. But, at the same time, we expect them to reject any pursuit of *our* luxurious and wasteful way of life that practically guarantees a full belly and a flush toilet. Plus, though we may preach that a simpler, more primitive culture has infinitely more value, harmony, and persistence than our own, we seriously worry about the sanity of those people who change their behavior to pursue such a

life—especially when they don't have to.

But, I am a stubborn fool and last Sunday I kept pushing around that flimsy lawnmower, stopping for stupid sticks and running starts, muttering over and over to myself: "I'm not embarrassed—let my neighbors think what they will—that I'm crazy or smug or a queer throwback to another age." But something worse happened. My neighbors felt *sorry* for me, and generously offered me the use of their gas-powered lawnmowers. They shook their heads in puzzlement when I gallantly refused the assistance, and they now are watching my progress strictly for entertainment. I know what it feels like to be misunderstood.

Still, one step at a time, I tell myself. The puzzling thing to most people is why you suffer inconvenience when: a) it's not required by law, b) it wastes

time, and c) it doesn't serve any immediately discernible purpose.

I get this sense of deja vu about the whole thing. I guess I'm feeling the fallout from the environmental movement of the 70s when it was fashionable to have compost piles and organic gardens and bicycles. Granted, now it's fashionable to ride bikes to work for fitness, but not for the sake of the environment.

The "environment" is such a nebulous term, anyway. It doesn't surprise me that we lost interest in it after awhile during the 70s. Once we enacted the laws we thought we needed in order to halt the destruction and pollution of our environment, ecology went the way of miniskirts and go-go boots.

The problem is, the democratic process failed to provide the solutions we had counted upon. But, we can't blame the government. The intent of the law is there; we're the ones who have twisted that intent to serve our own purposes. We've proceeded to do everything in our power to circumvent our good deeds, to wriggle through the holes in zoning ordinances, in toxic waste disposal, in air pollution control, and every other environmental law that restricted our freedom in order to get precisely what we wanted. Once we found a way to slip through the laws with our smart lawyers and creativity, we congratulated ourselves on our craftiness and ability to get what we wanted within the framework of the law. No wonder we're in such a mess.

So, though I often feel haunted by a feeling that "I've done all this before," I'm compelled to pursue once again that unpleasant task of assuming *personal* responsibility for my actions—even though it might not appear to make any difference. After all, miracles have been known to happen, especially when you believe in the difference between right and wrong.—Virginia Shepherd

# VIRGINIA WILDLIFE



American toad; photo by Vinyard Bros.

# **Features**

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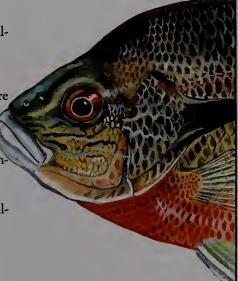
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# Blue Ridge Fishing

# by Bob Gooch

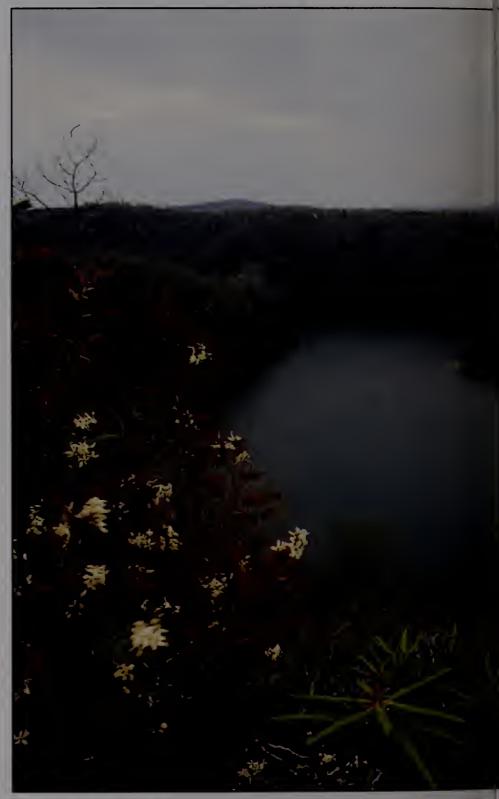
If you're looking for easy water to fish, don't try the Danville Lakes. Let's put that up front. Now, downsize that warning statement a little. Does hand-carrying your canoe or light boat 50 yards or so bother you? If not, these little lakes could be your route to some near-wilderness fishing. Taking your boat out could be the toughest part, because it means dragging the craft uphill.

If you're ready for a little work, then these picturesque lakes open the door to some special fishing in the rugged Patrick County mountains just off of the scenic Blue Ridge Parkway.

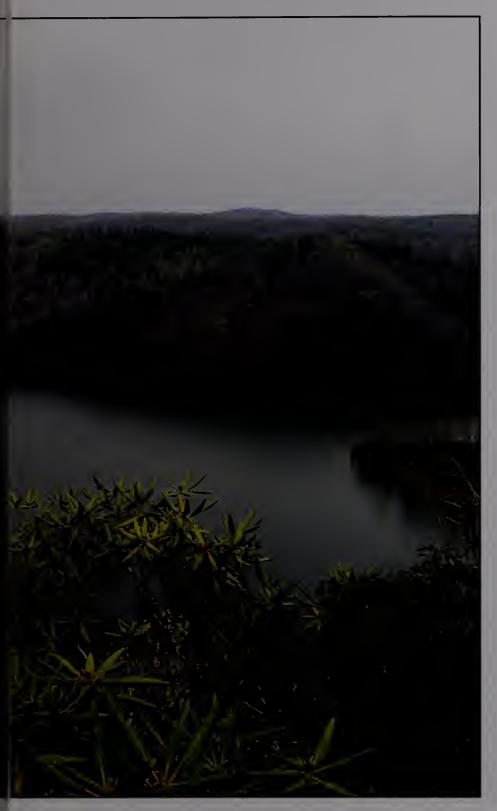
Located in the deep, narrow, and winding Dan River valley just east of the famous Pinnacles of Dan, these small hydroelectric lakes produce electricity for the city of Danville. Old lakes built back in the early 1930s, the city first put them into operation in 1938. Townes, the lower or downstream lake, is smallest at 40 acres, while Talbott Lake just a few miles upstream claims 165 acres of the rugged mountain valley. Talbott stretches for approximately two miles from its upper Otter Arm to the Bend of the Dan where the riverbed doubles back on itself. Townes Lake is approximately a mile long from its headwaters to the Round Meadow arm near Point Lookout.

Big Cherry, Ivy, and Tangle Creeks are the major Dan River tributaries that drain into Talbott Lake while Mayberry Creek, Round Meadow, and Sawpit Branch flow into Townes. Mill Creek enters the Dan River between the pair of lakes.

Both are high elevation lakes with the surface elevation of Talbott Lake 2,526 feet at full pool. At 2,212 feet,



# The City of Danville's lakes, Talbott and Townes, are two secrets of Patrick County that harbor trout, bass, bluegills and spectacular mountain scenery.



View of Danville lakes; photo by Bob Heafner.

Townes Lake downstream is slightly lower. High country, towering peaks and mountain ranges, overlook the lakes. Steep wooded cliffs level off slightly at 2,700 to 2,800 feet above Talbott, and 2,700-foot Point Lookout overlooks the lower reaches of Townes Lake. Just to the south of Point Lookout, and towering above Townes Lake, are peaks that stretch to almost 2,800 feet. It's mountain country, spectacular and inviting, but at the same time forbidding—not the kind of country to be take lightly.

Glance to your right as you drive or hike down the paved, but narrow, access road to Townes Lake and you'll see the famous Pinnacles of Dan stretching toward the sky. This sharp mountain peak rises abruptly from 1,500 feet in the Dan River basin to a lofty 2,663 feet. Shift your gaze into the river valley and you'll see the adqueduct tunnel, a snakelike pipeline, that carries water from Townes Lake to the Pinnacles Power Plant.

Fishing is mostly limited to local anglers who know the lakes well, and they catch a rich variety of fish—bass, both largemouth and smallmouth, bluegills, channel catfish, crappie, and trout. Native trout streams drain into the lakes and both lakes, plus the Dan River between them, offer trout fishing—probably for browns and rainbows, but also a few brookies.

The lakes are not stocked at the present, but the native populations seem to be thriving. A constant flow of icy water from beneath Talbott Dam maintains year-round water temperatures that are acceptable to trout. Fishing for wild trout in that section of the river is an intriguing possibility, but reaching it is not easy. There are two

# City of Danville Lakes Talbott Reservoi

# Before you go . . .

Before you strap your canoe on the car rack and head down the Parkway, be sure to get a fishing permit from the city of Danville, owner of the lakes, in addition to your state fishing license. You'll need it to get through the gates that block the access routes to the lakes. Call 703/251-5141 and ask for a permit for the day or days you want to fish-and allow time for the mail to bring it to vou. Or write if you prefer. The address is Pinnacles Hydro-Electric, Route 1, Ararat, Virginia 24053. If it is more convenient you can pick one up at the City of Danville, Electric Department, Danville, Virginia 24541. The permit allows you, your vehicle, and boat on the property and gives you the combination to the gates that block access to both lakes. There is no charge for the permit, but to become valid it requires vour signature.

Advance arrangement for permits is the safest approach, but you can also pick them up at the Townes Lake access road between 7:15 a.m. and 2:45 p.m. daily.

The only other restriction on fishing these lakes is the size of outboard motors. The city is currently considering a cap of 5 or 7 1/2 horsepower. But there is also a practical limitation. How heavy a motor do you want to lug along a mountain trail? Electric motors are entirely adequate for fishing the relatively small lakes and there are no restrictions on their use. But consider the weight of the battery. Use the lightest one available. □

possibilities. You can launch a boat on Townes Lake and motor, paddle, or row up the lake to the lower reaches of the river and fish upstream, or you can park your car at Talbott Dam and work downstream.

As a crow flies, it's just a little over a mile from the Talbott Dam to the upper reaches of Townes Lake, but the river, racing, twisting, and turning back on itself, offers over four miles of fishing water. Various jeep trails also lead to the general area of the river, but this means eventually climbing down the steep bluffs along the river to reach the water. And, still worse is climbing out! One such possibility is a jeep trail off of Secondary Route 606 from the north to Wildcat Knob overlooking the river.

Anglers interested in four-wheeling and hiking to the remote stream between the lakes should get a copy of the Meadows of Dan Quadrangle, or topographic map, from the Virginia Division of Mineral Resources, Charlottesville, Virginia 22903. The cost, including tax is \$2.61. The map will prove helpful even if you want to fish the lakes only. It shows the secondary roads and jeep trails that provide access to the lakes plus topographic features around them. It will show, for example, the many deep points in Talbott Lake, points that should offer good fishing.

The river below Townes Dam also holds the possibility of good tailwaters fishing, but at present the aqueduct tunnel which bypasses the river leaves the bed dry most of the time. "We're working with the city to correct that," said David Whitehurst, operations coordinator for the Fish Division of the Department of Game and Inland Fisheries. "We also hope to provide better access to the lakes if we can."

Bob Heafner of Floyd County, publisher of the *Mountain Laurel*, plans to try canoeing and fishing the stretch of the Dan River between the two lakes. This means launching a canoe below Talbott Dam, canoeing the river, paddling the mile-long Townes Lake, and taking out at the Townes Lake access point. A trail leading from the Talbott access road to the river below the dam is steep and narrow and sliding a canoe

and equipment down the trail will not be easy. But it offers an interesting possibility, one to be approached with caution. The river is low and rocky when water is not being released from the dam. A call to Heafner 703/789-7193 or 7194 might be wise before attempting this trip. Also check with Pinnacles Hydro-Electric (703/251-5141) to see if water is being released.

Another attractive possibility is a wilderness hike down the Townes access road and along the aqueduct tunnel to a jeep trail leading off of Secondary Route 724. The hiking trail along the aqueduct, the jeep trail, and the secondary road are all shown on the Meadows of Dan Quandrangle.

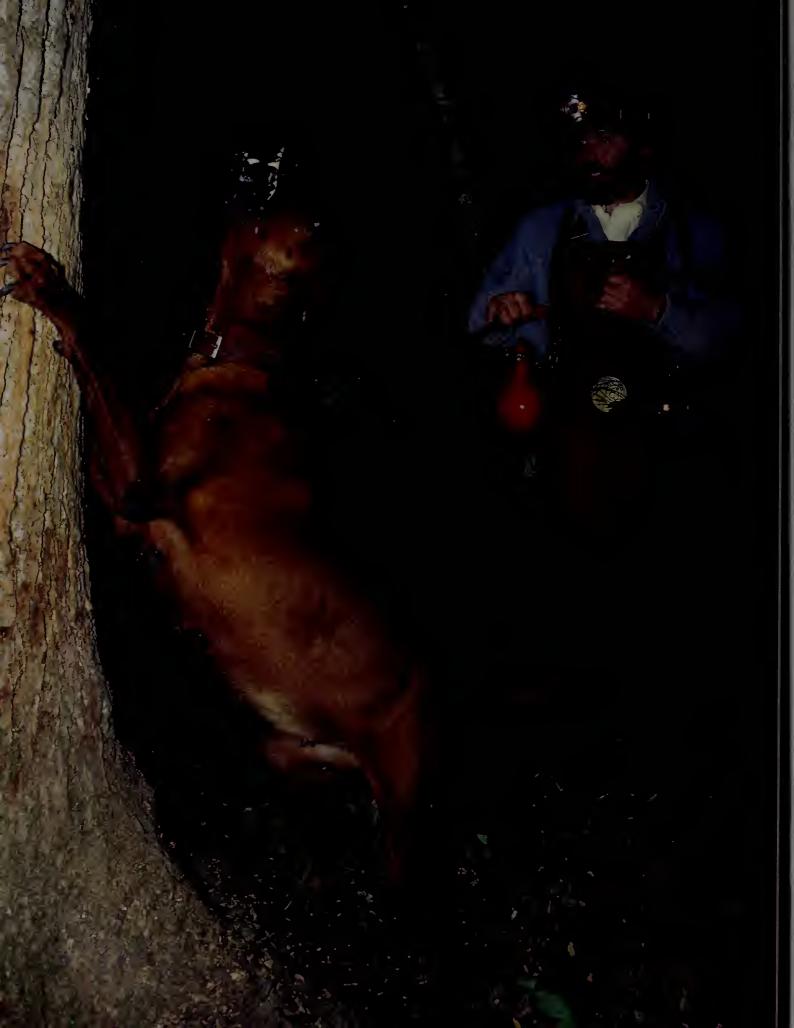
The scenic Blue Ridge Parkway is an ideal route to the general area. Turn left off the Parkway at Secondary Route 634 just south of milepost 180, then left on Secondary Route 602, and stop at colorful Mayberry Trading Post which has served as a hub of the community since before the turn of the century. Miss Addie Wood, 87year-old proprietor and a lifelong resident of the community, can answer just about any question you have in mind regarding the region and the lakes. It's a good place to kick off a trip, regardless of whether you fish the lakes or river, or hike the aqueduct

To reach the Townes Lake access point, simply drive south on Route 602 to the access gate. It's approximately two miles. It takes a bit longer to reach Talbott Lake, but go north on Route 602 to Route 601 and follow it south to the access gate. It's a little over two miles to Route 601 and then another four south to the access gate.

Another tailwaters trout fishing stream, better access to the lakes and stream, and possibly a better fisheries management plan all loom in the future for the Danville Lakes and the Dan River region along the Blue Ridge Parkway. For now they offer good wilderness fishing in the Old Dominion, a state not noted for its wilderness lakes.

That alone is worth the trip.  $\Box$ 

Bob Gooch is an outdoor newspaper columnist and author of several books on hunting and fishing. He lives in Troy, near Charlottesville.



# Coon Hunting Grows Up

There are many who think that coon dogs are just flea-bitten mongrels and coon hunters ill-mannered scoundrels from the hills. They've got it all wrong. Bruce Ingram tells the story of a whole new sport of sophistication, high-minded ethics and big money.

by Bruce Ingram

Opposite: photo by Lynda Richardson.

or years, coon hunters have something of a stepchild—especially time, is pleased with how the sport has when compared with sporting pursuits evolved. such as flyfishing or upland bird hunting. After all, weren't coon hunters coon hunting has changed," he told little more than unkempt mountain me. "Modern day coon hunting can be men and their dogs just ragged mongrels from the hills?

one is dead wrong. Anyone who area's economy. People from 15 to 20 attended the 24th annual United States states attended this championship as Championship Wild Coon Hunt, sanc- well as from Ontario." tioned by the American Kennel Club/American Coon Hunters Asso-pionship before the Dublin affair. ciation, held in Dublin this past Febru- Some of the displays and merchandise ary can attest to how the sport has I expected to see; things such as minbecome very modern and sophisti- er's hats, battery packs, bumper stick-

struggled with the public's per- resident and a prime mover behind the ception that their pastime was event coming to Virginia for the first

"Many people aren't aware of how big business, and when the AKC agreed to come to Dublin, it meant a lot of Just as most stereotypes are, that money would be pumped into the

I had never attended a coon chamcated. Charlie Cassell, a Rural Retreat ers, hunting clothes, boots, and hats

were all in abundance. But I was amazed at the wide variety of high energy foods, vitamins, and nutritional supplements available for dogs as well as the state of the art medicine available for any ailment that a hound might come down with.

I was also astounded with the dollars a prime coon dog puppy brought. There are six registered breeds, with Walkers accounting for about 50 percent of the dogs present at any competition. The Walker's omnipresence, says Charlie Cassell, is because they win about 70 percent of the tourna-

A prime Walker puppy can bring as much as \$400, and any young cooner—regardless of whether a black-andtan, bluetick, a Redbone, a Plott, or an





Above: Nite Champion Timber Chopper Rocky; photo by Lynda Richardson. Left: Creed Smith and his 4-year-old treeing Walker Clipper, worth more than \$50,000; photo by Bruce Ingram.



English—can command \$250 and up. But I was floored with the price that had been offered for Creed Smith's four-year-old treeing Walker, Clipper. That hound won the American Coon Hunters Association World Championship in Flora, Illinois last year, and since then Smith has been offered up to \$50,000 for his canine.

"Clipper is worth more than \$50,000, and that's one reason why I didn't accept that price for him," said Smith who lives in Hamilton, Ohio. "Another reason is that I just don't want to part with him for any price; he's got it all—heart, desire, and brains. I used to hunt him five or six nights a week, but he is much too valuable now to take out into the woods. He could get run over by a car or get caught in a convention halls. That's good, because trap. So, Clipper has been retired to we get to share our passion for coon stud, and I charge a \$300 stud fee for hunting with so many more people. him."

hunting also shows admirable progressiveness with its "catch and release" philosophy; indeed, it is a rule that no ringtail can be killed. Before a hunt commences, four dogs and their owners are randomly drawn to make up a cast. A judge then escorts the group to a hunting territory.

"The rest of the rules for a competition coon hunt are so complicated that only a Philadelphia lawyer or a coon hunter could understand them," said Charlie Cassell. "Basically, though, points are awarded for a dog striking a raccoon's trail or for treeing an animal.

"If a dog trees and no coon is found, then points are subtracted. There are also circumstances where neither positive or negative points are awarded. In any event, the judge's decision is always final. The hunt lasts for two hours, but the hunters can always call time out like in a basketball game—and move to another area if the one they are in seems to be lacking raccoons.'

Giving evidence to the fact that this year's U.S. Championship was indeed of national scope, the winning entrant on the opening night of the event was Sonny, a treeing Walker owned by Darrell Kizer of Pennsylvania. David Matney of Virginia, however, was able to take second and third place with his Walkers, Annie and Ann. Generally, dogs that finish high up in the standings are good all-round canines, being equally adept at both striking and treeing. A dog that only does one of these things well may be good to have in a pack of dogs when hunting around the local farm at night, but in competition, a one-dimensional dog rarely does well.

Still another part of coon hunting today is the comraderie present at tourneys like the one held in Dublin, according to Dean Testerman, master of hounds at the U.S. Championship.

"I have been a coon hunter for 40 years, and am amazed at how the sport has changed," said Testerman who lives in Marion. "We coon hunters have come out of the woods into the

"The fellowship and comraderie tor to Virginia Wildlife.

Modern-day competition coon that existed for our tournament in Dublin was just really thrilling. It's true that people were there to seal deals for dogs and compete. But the main reason that any group of coon hunters come together is to swap tales and learn about their sport."

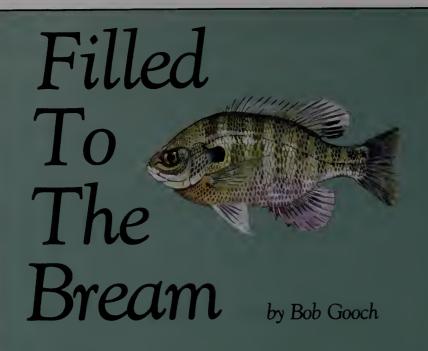
> If an individual came to the Dublin affair last February expecting to find only bearded mountain men present, he would have been sorely disappointed. Eli Jones, a board member for the Virginia Game Department from Tazewell, told me of the changes that have taken place in the sport.

> "Coon hunters just aren't good ol" boys in bib overalls anymore," he told me. "The makeup of the coon enthusiast has changed, and that's great. There were a number of women and children at the championship event this year and there was even a church group. Plus, there was no alcohol anywhere to be found. Coon hunters today aren't the lawless renegades that some people think they are. The coon hunters in my district are some of the best organized sportsmen that I deal with, and they go a long way in policing themselves. There's a lot for the sportsmen to see and do in Southwest Virginia, and events like the championship do a good job of showcasing the region."

> Coon hunters of the old days may be rolling over in their graves at how their sport has evolved. They would have been shocked at the changes that were evident at the Dublin affair: sights such as \$50,000-plus dogs, church groups serving food, salves and ointments for sore-footed canines, vitamin supplements, and—horror of horrors for this formerly male dominated pastime—women and children in attendance! But this evolution has definitely increased coon hunting's visibility and improved its image—and that's a healthy thing to have happen for any form of hunting or fishing.

> For more information about coon dog competition in Virginia, contact: Charlie Cassell, Southeastern Treeing Walker Association, P.O. Box 376, Rural Retreat. VA 24368. □

Bruce Ingram is the Virginia editor for Outdoor Life magazine and a frequent contribu-



Virginia is full of bream—from bluegill to shellcrackers. So, how do you pick a favorite?

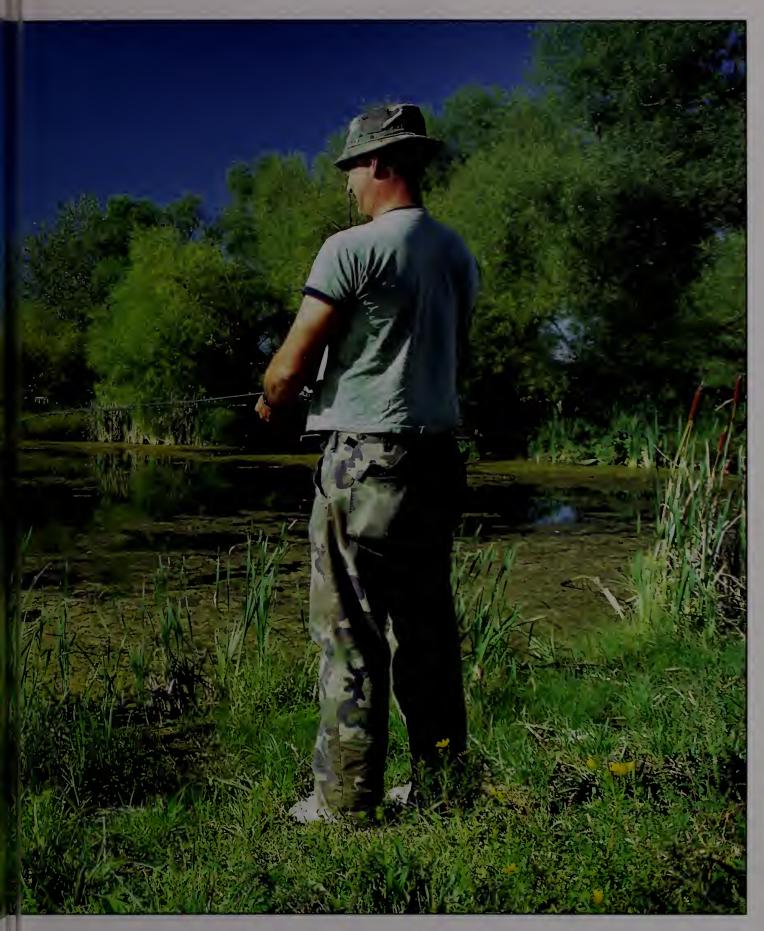
Now, that is the most popular bream? Now, that's a good one to chew on. But you might grind your teeth to the gums and not come up with a good answer. I suppose a survey of all licensed Virginia anglers could produce a fairly accurate assessment—but not one all would agree with.

After all, first you would have to get a consensus on what a bream actually is. Some fishermen would limit it to the bluegill, others would include the redbreast sunfish, and still others might even include the rock bass of our western streams. It's interesting to note, however, that for citation purposes, the Department of Game and Inland Fisheries doesn't include the rock bass in its general lumping of the sunfish. Even the little redeye gets a category of its own. The word "bream" is not in the fishery biologist's vocabulary. It has no scientific definition. It's simply a catchall name that fishermen use to cover bluegills, fliers, pumpkinseed, warmouth, and other fish that generally resemble the stubby bluegill.

Take the various bream, put them side by side, and start comparing them. Try to make lists of their strong and weak points and see what happens. Fishing experiences will enter the process and muddy the water. Those experiences will vary depending upon where the angler lives, where he fishes, and whether he is a spinning enthusiast, a fly rodder, or a cane pole advocate.

photo by Rob Simpson





JUNE 1989



When you consider the various bream, the bluegill is always up there near the front. In Virginia it is probably the most abundant, the most widespread, and usually the most available for the majority of fishermen. These considerations alone would make it a front-runner in any popular-

ity contest.

A funny thing about the bluegill is that today it is probably more abundant in relatively new waters than in native waters. Many of the very best bluegill waters did not even exist 50 years ago. Back in the 1930s, the bluegill was mostly limited to old millponds, slow-flowing eastern streams, and some city water-supply reservoirs. Lake Prince, one of the best waters in Virginia for big bluegills, didn't even exist in the old days. Neither did Buggs Island Lake, the biggest bluegill fishing hole in Virginia. The farm pond introduced thousands of Old Dominion anglers to bluegill fishing, and these little impoundments continue as one of the most popular waters for bluegill fishing—and often some real bulls.

Someone has said that if the bluegill grew as large as the bass, you couldn't land it. That may be stretching it a bit. The fighting ability of a fish doesn't necessarily increase proportionally with its size. But, the bluegill is a scrapper, and taken on light tackle, it gives a good account of itself. That's a

plug for its popularity.

The little fish also hits readily and takes a variety of baits and lures. Ordinary earthworms are a favorite bait, particularly among young anglers who usually dig their own. But the list of possibilities is endless. The larva of wasps is good. So are crickets. Young

"A funny thing about the bluegill is that today it is probably more abundant in relatively new waters than in native waters. Many of the very best bluegill waters did not even exist 50 years ago."

beneath a bobber which suspends it in the water. They continue to adjust the position of the bobber until they find the depth at which the fish are feeding. The smallest float possible should be used. Watching the bobber dance and suddenly disappear beneath the surface with a loud pop remains one of one of the smallest of all the bream. the greatest thrills in fishing—for young and old.

More experienced anglers like to use a free line, allowing the bait to sink slowly. They watch for a sudden movement of the line which indicates a

fish has the bait.

anglers tend to fish natural bait they do have lots of choices when it that is abundant in our clear, free-

comes to fishing for bream. Not only do they enjoy a rich variety of species, but also a wide variety of waters.

Farm ponds are undoubtedly one of the most popular places to fish for bream, but that's just a beginning. Look at all of the lakes of the Department of Game and Inland Fisheries, the city and county water-supply reservoirs, the giant impoundments, the old millponds, the meadow creeks, the fast mountain streams, the tidal rivers, and so on. You can find all kinds of good bream water in the Old Dominion. And you can fish from a bass boat, the banks, from a canoe, off of docks or piers, from a pontoon boat, from a small johnboat, or you can wade. Many prefer wading.

Bluegills will also hit a variety of artificial lures, everything from tiny dry or wet flies to bass crankbaits. The favorite, however, is probably the cork popping bug. Dropped lightly on good bluegill water, it may prompt a resounding strike immediately. If it doesn't, twitch it lightly and one is almost guaranteed. Many consider the spawning season the very best time for popping bugs. It may be, but slowly working a shaded shoreline with popping bugs may produce throughout the summer, particularly if it is lined with overhanging vegetation.

The bluegill has a very small mouth, Small flies, hooks, and popping bugs will hook more fish—even though some good bluegills are taken on large lures. Generally, the best rule to follow

is the smaller the better.

Another bream dear to the hearts of many Virginia anglers is the redbreast Virginia anglers are fortunate in that sunfish, a spunky, hard-hitting fish



flowing streams. It's a native fish, and many consider it more colorful than the bluegill, thanks to its bright orange belly and black flap on its gill covers. It, too, hits hard and readily, and it fights a fast, stubborn battle in the clear, cool waters. The fish is abundant in most good smallmouth bass streams. Plus, these little bream move far up the feeder streams—into tiny waters. The upper James, for example, is an excellent redbreast stream, but the colorful panfish is found throughout the river system.

Statewide, the redbreast is probably not as abundant or as readily accessible as the bluegill, not like fishing a farm pond full of bluegills. The very best fishing means getting into the stream by canoe or light boat and drifting, or simply getting in and wading.

While the redbreast will also hit a variety of natural baits, most are probably taken on artificial lures. The little panfish is generally not as accessible from docks or piers, or even from the banks of a stream, though a bank fisherman who locates a good hole in a stream can fill his stringer with the

tasty little fish.

I will venture a guess that more redbreast sunfish are caught with spinning tackle than by any other method. The fish seems made for drifting a stream in a canoe or light boat, and it also lends itself to wading. Just about any small spinning lure from the spinnerfly combinations, to grubs, jigs, and small spoons will take the fish. They aren't particularly selective. They will also hit flies and streamers—with

The redbreast's mouth is larger than that of the bluegill, but even so, the ideal hook or lure is small. I've caught

". . . I don't catch many shellcrackers on popping bugs or topwater lures, but work a lure along the bottom or bait up with a nightcrawler and you can expect some action from those 'hard-to-catch' bream."

some nice ones on smallmouth lures. but I wouldn't recommend them for this bream.

I suspect a survey of anglers might produce a footrace between these two bream for the most popular in the state. I wouldn't want to put any money on the winner, but it's possible the bluegill's greater availability statewide might give it an edge. Otherwise there is little to choose between the

"Some people don't like them because they're hard to catch," said the man from whom I bought some panfish for my pond. We were talking fishing.

about red-eared sunfish, more popularly known as shellcrackers. I debated, but decided to stock the sunfishalong with bluegills and largemouth bass. And, am I glad I did! The fish generally run larger than bluegills, and they are a joy to fish for.

No, I don't catch many shellcrackers on popping bugs or topwater lures, but work a lure along the bottom or bait up with a nightcrawler and you can expect some action from those

"hard-to-catch" bream.

Another bream common to the slow-flowing streams and lakes and ponds of eastern Virginia is the warmouth. With its red eyes, large mouth, and wide vertical stripes, it resembles the rock bass of the western streams. It is usually most abundant over mud bottoms, and it can be caught in much the same manner and with the same baits or lures as the bluegill.

A bream pretty much unique to Virginia is the Roanoke bass, a fish found mostly in the Roanoke River. It closely resembles the rock bass. And down in the Dismal Swamp, the colorful little flier fins the dark waters of Lake Drummond. That's the only place I've caught them, but they do occur in other eastern waters.

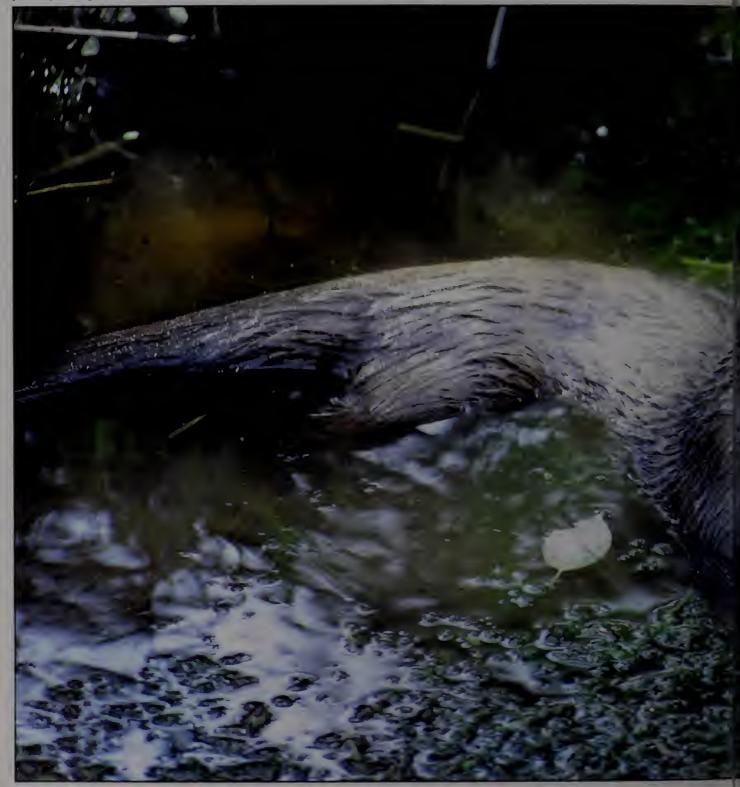
There are others, such as the pumpkinseed, a brightly colored sunfish, but most are limited in range or abundance.

That's a look at the breams as we know them in Virginia, and we still haven't come up with the most popular. But does it really matter? Not as long as the fishing is good for all of them!

Bob Gooch is an outdoor newspaper columnist and author of several books on hunting and

# Otters, Otters, And

photo by F. Eugene Hester

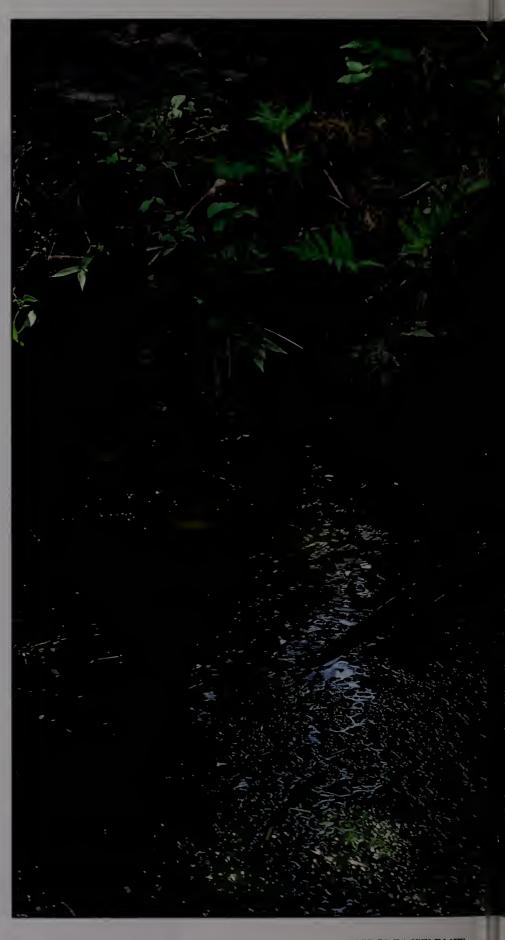




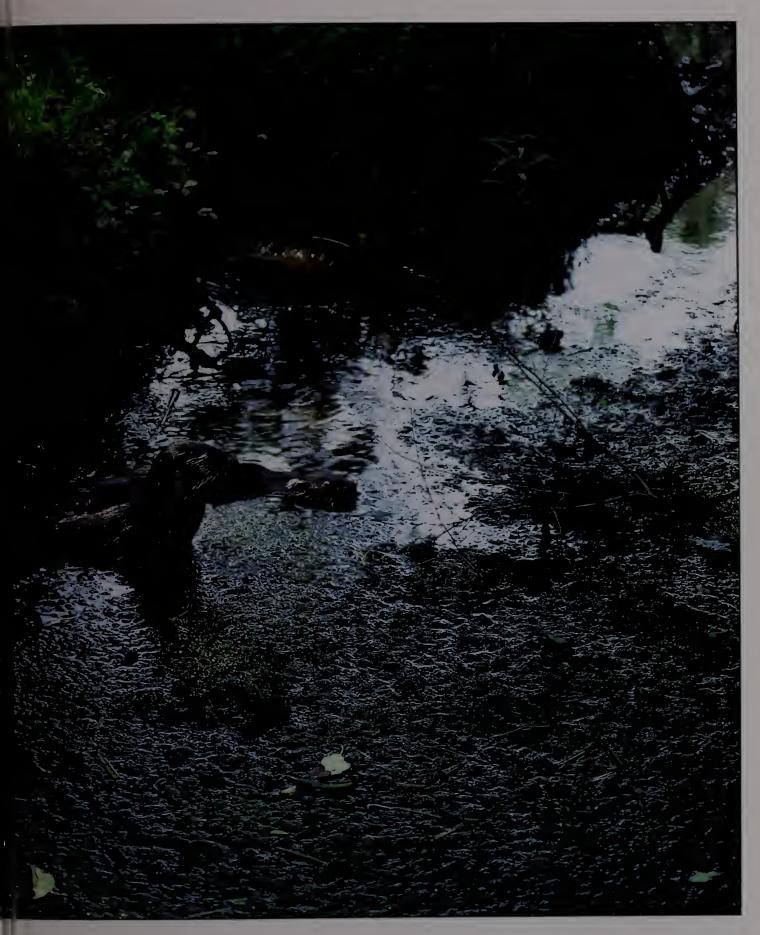
This new research project, designed by the Wildlife Division of the Game Department, has been initiated to test the effectiveness of introducing river otter (Lutra canadensis) into waters that historically have been home to the species. Although the northern river otter originally was found over much of North America, and formerly occupied one of the largest geographic areas of any North American mammal, because of loss of habitat, stream pollution, and excessive human pressure, we've witnessed the disappearance of the animal from our rivers and streams. Fortunately, however, they're on the comeback. What with the increase of beaver populations throughout the state, the scope and quality of otter habitat has also increased, since both animals are often found occupying the same waters. So, today, we have healthy populations of otters in many Tidewater counties, primarily in the food-rich marshes and swamps, and we're finding stable and expanding populations in much of the Piedmont.

However, western Virginia streams and rivers have remained nearly empty of otter since the turn of the century, so this spring we started the first phase of a prolonged experiment to repopulate the west with otters. Although we plan to trap and relocate otters within Virginia, the initial stocking was completed with 17 otters (8 females and 9 males) purchased from Louisiana. Three of these otters were implanted with radio transmitters with the help of Dr. Stuart Porter of the Wildlife Center in Weyers Cave and Dr. Keath Marx, a soon-to-graduate Virginia Tech veterinarian. The implant is a fairly simple procedure that has been successful in many similar studies and consists of surgically implanting a small plastic transmitter in the abdomen of each otter. Each transmitter emits about 50 short signals per minute and should last from 15 to 25 months. It is powered by a lithium battery and

Otters have been absent from the mountains of western Virginia since the turn of the century. A Game Department project to re-establish populations there hopes to change all that; photo by F. Eugene Hester.



VIRGINIA WILDLIFE





- Fish, crayfish, and other aquatic invertebrates are the main food items for otters in Virginia, although they will eat practically anything, from birds and berries to insects. They eat all kinds of fish, but are more adept at catching the slower forage fish such as suckers, chubs, darters and daces.
- Otters are normally solitary and do not form pair bonds, although observed groups of otters are thought to be family units, consisting of an adult female and the young of the year.
- Otters begin reproducing at age two. Breeding takes place most often in March or April, but fertilized eggs do not implant on the uterine wall for several months. This is a process called "delayed implantation" and is common to most species of the mink and weasel family (the Mustelids), and also to the black bear. Once the egg implants itself, the gestation period only lasts about 61 to 63 days.
- Usually a litter consists of two to four otters, although they
  can range from one to six. Newborn otters are blind, but are
  fully furred, small replicas of adults. They grow rapidly on
  milk that is high in both fat and protein.
- An otter's body configuration offers a prime example of agility and low resistance in water. Short, stubby, webbed feet are attached to a round, torpedo-shaped body with a long cylindrical tail. The tail, incidentally, accounts for more than one-third of an otter's total body weight. Not unlike seals, the otter is well-adapted to its aquatic habitat.
- The pelage, or fur, of the otter is short but very thick. The longer guard hair covers the much denser underfur. Colors will range from a dark chocolate brown to a pale chestnut or light brown, and some tend toward gray. Both body size and length of the fur are related to climate, with otters in northern habitats exhibiting larger body sizes and longer fur. □

photo by Gregory Scott



equipped with a mortality monitor that is simply an electrical system that will change the number of signals per minute if the animal does not move for seven to eight hours. Such implanted transmitters appear to have no effect on behavior or reproduction and will remain with the animal the rest of its life.

All 17 otters were released in the Cowpasture River in Bath County after notifying landowners and local governments of our research. And, once free of their cages, the otters put on quite a show for our cameras. Some immediately went to the clear water and swam; others spent time rolling along the shore. One found an instant den in a vacated goundhog hole and two took up temporary residence in a bank overhang of roots and soil. A female found favor with a small brush pile and began building a nest with sticks, leaves, and vegetation while we watched and filmed her activity.

One week after the release, 13 of the otters had survived, which is typical for similar releases in other studies, and they will continue to be monitored daily by Wildlife Biologist technician Peter Tango, who worked on a similar restocking project in West Virginia.

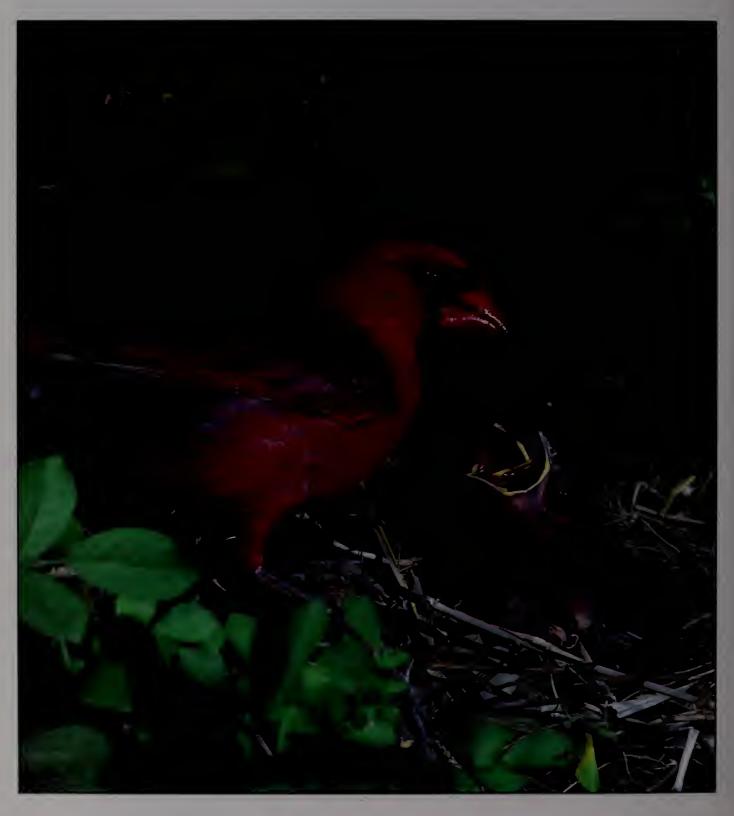
Conditions on the Cowpasture River have been favorable for the otters since their release, with seasonably low water levels and lack of rainfall and runoff producing exceptionally clear water. Fish and other aquatic organisms are the major sources of food for the river otter, and while they are adept at catching prey under a wide range of conditions, otters have been shown to be more efficient predators in waters of low turbidity. Thus, the clear waters of the Cowpasture should help our transplanted otters catch food. Riverbank cover and restricted access by humans should also help the otters survive.

The result of this two to three-year study should provide the information we need to plan future relocation projects. Perhaps within a few years many of our mountain streams will be home to the otter once again. We hope so.

Dennis Martin is a research biologist with the Department's Wildlife Division.

by Elizabeth Stinson

# Pesticides:



# Killers In Disquise

re insects getting more out of your garden than you are? Are the Japanese beetles making your prize roses look like Swiss cheese? Is a fungus growth threatening your peach crop? Are you annoyed with the pests that are making your home less attractive and competing with you for food? If you are like many environmentally conscious people, you do enjoy gardening, but you're also aware that pesticides have been linked to human and wildlife losses. Can we use chemicals to control pest damage without threatening the health of ourselves, our children and pets, and our

Pesticides have been used for centuries to control unwanted animals and plants. The ancient Romans burned sulfur to deter insects, and salt was used as a herbicide in 9th century China. Today, however, the term "pesticide" usually refers to manmade chemical mixtures used to control insects, fungus, plants, spiders, mites, and rodents. Billions of dollars are spent developing, testing, and marketing a multitude of chemical pest control products. Pesticides are part of the technology producing many of the benefits we enjoy in this country. Their use is in part responsible for the unblemished fruits we eat, and the control of diseases such as malaria. Their use has also had negative impacts of unknown magnitude on human health, wildlife, and our ecosystem.

Are pesticides harmful to wildlife? Pesticides are designed to kill living organisms and are often nonspecific in their effect. Thus, it is not surprising that pesticides also affect non-targeted organisms.

We probably don't see most of the impacts of pesticides on wildlife. A bird or small mammal sick from eating poisoned insects or treated seeds will often head for dense cover to hide. Animals killed by pesticide poisoning

We've all become accustomed to using chemicals to control the pests in our lawns and gardens. But, scientific evidence has shown that chemical controls often kill more than pests. There are alternatives, if you are willing to sacrifice some beauty and bounty.

Opposite: Especially vulnerable to pesticides are nesting birds like the cardinal pictured here; photo by Jack R. Colbert.

may decompose readily or be quickly consumed by scavengers. Other animals may move into an area when the original residents are gone, masking a local kill. Wildlife using a thick tangle may simply leave when that cover is destroyed by herbicides. Honeybees go back to their hives after being exposed, and die there. Other beneficial insects and soil organisms are so minute that we overlook them, but they, too, are destroyed by pesticides.

Pesticides can affect wildlife in a variety of ways. A particular chemical may be more toxic to one species than another, or affect animals within a species differently, depending on age, sex, or condition. Routes of exposure to pesticides also vary. Wildlife may come into direct contact with pesticides by eating treated seeds, contaminated vegetation, or pesticide-impregnated granules. Inhalation and skin contact, as well as grooming or preening contaminated fur or feathers, are also important direct routes of exposure. Indirect, or secondary, poisoning occurs when animals eat prey poisoned by pesticides. Raptors may be harmed by eating sickened birds or mammals. Likewise, insects are frequently more visible after pesticide treatment, making them attractive but deadly—to birds. During broodrearing, birds may take poisoned insects to feed their offspring. Consequently, their nestlings may experience lower weight at fledging and reduced survival.

The effects of pesticides are often subtle. Wildlife are subject to a multitude of stresses every day. Excessive heat and cold, starvation, avoiding predators, and the energetic demands of reproduction and migration are factors animals must deal with to survive. They are less able to cope with these stresses when their fitness is compromised by toxins. Many currently used insecticides interfere with normal

# Pesticide Information

### Emergency telephone numbers:

Animal Poison Control Center (217) 333-3611 National Pesticide **Telecommunications** Network (800) 858-7378

### General Information:

Chemical, Drug and Pesticide Unit, Virginia Tech (703) 231-6543 Virginia Department of Agriculture and Consumer Services Office of Pesticide Regulation (804) 786-3798 Virginia Department of Health, Bureau of Toxic Substances Information (804) 786-1763

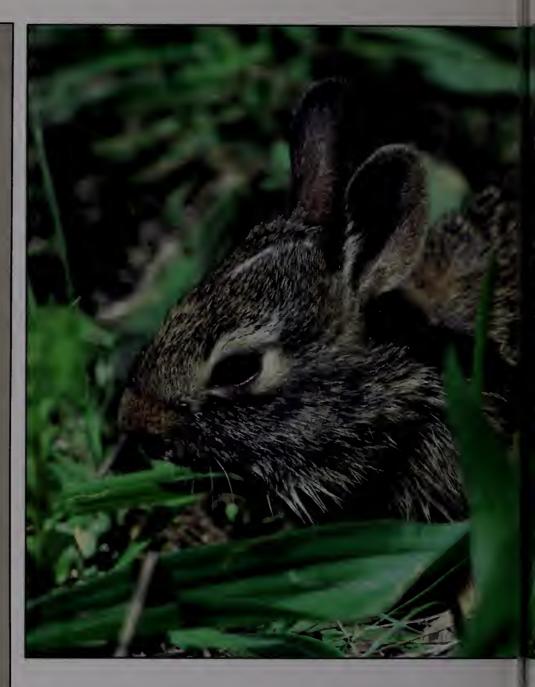
## Selected Sources of Natural Pest Control Products:

Necessary Trading Company 422 Salem Ave. P.O. Box 305 Newcastle, VA 24127

Gardens Alive!<sup>™</sup>—Safe products for a healthy garden The Natural Gardening Research Center Hwy. 48 - P.O. Box 149 Sunman, IN 47041

Harmony Farm Supply P.O. Box 451 Graton, CA 95444

Peaceful Valley Farm Supply 11173 Peaceful Valley Road Nevada City, CA 95959



transmission of nerve impulses. Researchers have observed that birds exposed to certain insecticides have areas or along fence lines removes reduced ability to avoid predators, even though they show no overt signs of poisoning. These nerve poisons also may interfere temporarily with normal mating and nesting behaviors.

Pesticides also affect wildlife by reducing habitat productivity. Insect these beneficial organisms are often populations knocked down by insecticides are no longer available as food for birds, small mammals, reptiles and Honeybees are especially vulnerable, amphibians. Herbicides also reduce since bees may poison an entire colwildlife food resources by destroying ony by taking contaminated particles

vegetation needed to support insect populations. Using herbicides in rough potential cover for cottontails and bobwhites.

Earthworms, soil microorganisms, predatory insects, and honeybees are tiny but important components of our backyard ecosystems. Unfortunately, more sensitive to insecticides than the pests that chemicals are meant to kill.



Chemical pesticides affect more than the targeted insect pests, and often their killing damage to wildlife isn't obvious. Eastern cottontail; photo by Jack R. Colbert.

back to the hive.

### Consider Alternative Controls

What are some of the things you can do to minimize the impacts of pesticides? The bottom line is—if your highest priority is wildlife, avoid using pesticides. If you are bothered by cerand effective alternatives to pesticides. that appear to be less harmful to birds

Biological controls include predators, parasites, and pathogens to reduce pest numbers. There are many products available, from lovely ladybugs to feed on your aphids and potato beetle eggs, to the minuscule bacterium Bacillus thuringiensis (Bt, also Dipel®) that combats caterpillars, cornborers, and even mosquitos. Resistant plants that will stand up to insects, nematodes, and disease can be purchased from your favorite gardening catalog or nursery.

Cultural controls, or changing the way you grow your crops, can be initiated to make the environment less favorable for pests. For instance, mulching inhibits weed growth and enhances soil moisture retention. Rotating garden crops aids in reducing some pest problems.

Physical controls employ direct measures to kill insects. These methods can be as simple as removing pests from plants, or as elegant as using pheremones to lure Japanese beetles, corn earworms, or cherry fruit flies to

As you use these methods, you can be content knowing that insectivorous birds and mammals are also doing their share in keeping pest numbers down. By not using chemicals, you will find that most gardens become the home for insects that prev upon the pests causing damage. Songbirds work a healthy garden for insects every day. The stakes used for tomato plants become perches for these predators of insects.

### Choose and Use Wisely

If you decide that you must use pesticides on your land, you may minimize negative impacts on wildlife by avoiding highly toxic or persistent products. Diazinon (Spectracide®), dimethoate (Cygon®, Defend®), carbofuran (Furadan®), fenthion (Baytex®), and methiocarb (mesurol), are commonly used chemicals that have been implicated in significant wildlife die-offs or are extremely toxic to birds. The acaricide dicofol (Kelthane®), though considered only moderately toxic, has been under scrunity due to the similarity of its chemical structure tain pest problems, there may be safe to DDT. Some pest control products

and mammals include allethrin. Aspon®, carbaryl (Sevin®), diflubenzuron (Dimilin®), tetrachlorvinphos (Gardona®), methoxychlor, pyrethrum, resmethrin, and Ryania®. Bear in mind however, that many of these are extremely toxic to beneficial insects and other invertebrates.

How, when and where you use pesticides can have as great an influence on wildlife health as the type of pesticide you use. The primary rule in pesticide application is read and follow the label! Don't overapply—more is not better. Chemical companies carefully determine application rates for optimal pest control. Companies are also required to test their products' influence on wildlife. The label will tell you some ways to best reduce impacts on wildlife. The label also contains important information on what pest the product is to be used for, how to mix and apply the chemical, how to store it, and how to dispose of the pesticide container and any remaining contents.

Don't apply pesticides near streams, ponds, or lakes. Aquatic plants, invertebrates, and fish are often extremely sensitive to chemicals. Besides being of interest on their own merits, these organisms also provide food for ducklings, snakes, muskrats, and other wildlife. Avoid puddling of sprays. Birds are attracted to these pools to drink and bathe. If you use granules, try to work them into the soil so they are not exposed. A few grains of some insecticides are enough to poison some birds. Try spot-treating pest-ridden sites rather than spraying a large area. Don't spray on windy days. To protect bees, don't apply pesticides when flowers (including weeds) are in bloom. Try not to use pesticides where birds are nesting, or when birds are migrating.

Finally, ask yourself "is treatment really necessary?" It may be that the costs of indiscriminate chemical control to the living environment around you may not be worth the benefit of a single summer's unblemished garden. 🗆

Elizabeth Stinson is currently pursuing a master's degree in wildlife science at VPI & SU. Her research involves the effect of pesticides on by Bruce Ingram photo by Steve Maslowski

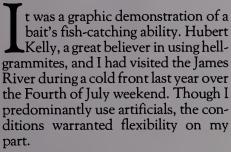
# Bugs Du



# Jour

Hellgrammites are back in vogue for river smallmouth fishing. They're effective and they're cheap if you seine your own.

Smallmouth bass leaping at hellgrammite; photo by Steve Maslowski.



After spending maybe 20 minutes seining these larva of the dobsonfly, we spent the rest of the day using this bait to catch smallmouth after smallmouth. Meanwhile, other anglers we encountered were struggling to just catch a few redbreast sunfish.

"A hellgrammite is my main bait or lure for river smallmouth," said Kelly who is a surveyor from Vinton. "It's the most natural bait in the stream, no lure can really duplicate a hellgrammite. These creatures are something a smallmouth bass has eaten all its life. Plus, hellgrammites are also much easier to seine than madtoms or crayfish, and many times will outfish both these baits.

"I took two boys from my church fishing last year. We had fun seining bait, and afterwards—in two hours—the three of us caught 130 fish. We caught several bass near three pounds and many, many 12 to 15-inch small-mouths. And that's not an unusual day. Hellgrammites are just a great bait for both an experienced angler and for someone just starting."

When you can find hellgrammites at tackle shops—and that is by no means a given thing—they are generally expensive, running over three dollars per dozen. But, part of the fun of fishing with live bait is gathering it. A

generic seine, available at many sporting goods stores, will work nicely. As a boy, I put a crimp at one end of an old window screen and used that as a seine. Regardless of what you use to corral these beasties, it's important to know where to look for them in the Old Dominion's upland rivers and creeks.

"Look for hellgrammites in the shallow riffle areas," said Kelly. "They generally won't be found in the deeper pools. Another little tip that will help in finding them is to locate places that have a little aquatic vegetation in them. This seems to attract greater concentrations of all kinds of aquatic insects.

"Have one person mind the net and make sure he or she keeps the back end of the net down while getting into position in the riffles. Have a second person go about ten yards upstream and walk toward the net. The wader should try to kick over all the rocks he can and create as much disturbance as possible. If you really want to be thorough, the wader can use an old garden hoe to stir up the bottom."

It's a good idea to keep only the larger hellgrammites; that is, those going two-and-a-half inches or longer. The smaller ones seem to attract a disproportionate number of panfish. If you are fishing a locale that is known to produce bigger bronzebacks, then is a prime time to use a nice four-inch hellgrammite. Regarding impaling this bait on a hook, it's a fact that a hellgrammite's "pinchers" can deliver a pretty good little pinch. To avoid this unpleasantry, grasp this creature just below its head between your thumb and index finger. Then take your hook and slip it under the insect's collar,

the best action.

light wire hooks. Their feeling is that hellgrammite on, just shake one out of this kind of hook does not impair a the box onto the lid and pick him up.

"Hellgrammites are also a great starter bait for beginning anglers . . . If you have a youngster who has been pestering you to take him or her down to the nearest stream this summer, there is no better way to get them hooked for life than to attach a hellgrammite to their line."

grammite, sans sinker, to float seduc- it too deeply." tively to the bottom. However, if you

hellgrammite fishing. "I use an old brushpiles, and eddies are other places

which is located just below the head. A metal band-aid box to keep my hellhellgrammite is at its best when lively, grammites in while fishing," said Kelly. but dead ones will also attract fish. "It's a cheap, efficient way to keep Again, if you are going after bigger them. Just put some damp moss in the bronzebacks, change bait often to get box and periodically during the day add a little water—that's all there is to Many live bait enthusiasts prefer it. When it comes time to put a new

> "At the end of the day, I put the bait left over into a Styrofoam cooler that has had some damp newspapers placed inside. If I plan on keeping the hellgrammites for a long time, I'll put a few dabs of coffee grounds in occasionally. Don't ask why I use the coffee grounds. I don't know the reason, but they do seem to keep the bait alive and kicking longer."

Although some people today look down upon those who employ live bait as not being "serious fishermen" or even worse as nothing more than "worm dunkers," there is real skill in properly working a hellgrammite friend who had only been stream fishthrough an area.

"It's really important to correctly sportsman. "Cast your bait upstream in a quartering position. After allowbody as it drifts downstream—that way you can better control things when a fish hits. Once the hellgrammite has drifted downstream from you, reel it in, and repeat your cast. However, your next cast should be to a slightly different area so that you can cover more ground.

"When a bass picks up your hellbait's squirming movements. Hubert grammite, don't wait too long before Kelly likes to tie on a swivel a foot or striking. I strongly believe in catch and above his hellgrammite so as to elimi-release, and one of the knocks against nate line twist. The amount of weight, live bait fishing is that fish will swallow in the form of a sinker attached to your a minnow, worm, or whatever too line above the swivel depends on the deeply. This, of course, usually results strength of the current where you in a dead fish. But if you only allow a are fishing. If you are working a deep smallmouth to run a few seconds with pool, for example, allow the hell- your bait, it almost never will swallow

There are a number of prime places are working a fast moving stretch, at- in a stream where a hellgrammite can tach enough weight to keep your bait be worked effectively. These larva from riding up and out of a bass' strike occur naturally in moving water sections such as riffle areas, so these Storing this bait while out on a obviously are hot spots. Current breaks favorite stream is another aspect of behind rocks, log jams, rocky points,

that should be worked. Light to medium light spinning rods and reels are great for casting live bait good distances. Six or eight pound test line is also a good choice.

If you decide to give hellgrammites a try for smallmouth bass, there is no need to restrict their use to just that fish. A good friend of mine swears that this dark brown bait is great for stream trout as well. Finicky brown trout, especially, have been known to recover from their doldrums in order to wolf down a hellgrammite. Native brook trout in their mountain streams have also been known to succumb to this bait. This may be heresy to "purists," but what is more "natural"—live bait or a fly made from some sort of synthetic compound?

Hellgrammites are also a great starter bait for beginning anglers. On my excursion to the James River with Hubert Kelly, we brought along a ing a few times in his entire life. The individual had caught no more than a present your bait," said the Vinton half dozen mossybacks up to that time. But on that day, he landed more than 15 smallies and a like number of rock ing it to sink, follow the bait with your bass and redbreast sunfish. Our friend was incredulous when told that this was not unusual when fishing hellgrammites. If you have a youngster who has been pestering you to take him or her down to the nearest stream this summer, there is no better way to get them hooked for life than to attach a hellgrammite to their line.

In the past, using hellgrammites for smallmouths was considered the best possible way to battle plenty of fish. The barefoot youths seen ambling off to a country stream in those Norman Rockwell style paintings—a rod over their shoulders and a bait bucket by their sides—were no doubt users of hellgrammites. Today, I, like most anglers, almost always employ lures. Still, it's good to know that Virginia sportsmen like Hubert Kelly still rely on this forgotten bait. And that people like you and I can rely on them too, when the fishing is tough, or when we simply want to catch plenty of 'em! □

Bruce Ingram is the Virginia editor for Outdoor Life magazine and a frequent contributor to Virginia Wildlife.

# June Journal

## Letters

### A Gift from Generation to Generation

As an avid outdoorsman, I have enjoyed your wonderful magazine for many years. The photographers and writers offer a unique perspective on what Virginia is about. As a resident of the great state of Nebraska for 23 years and occasional visitor to your state, it's refreshing to learn about and see the many different aspects of outdoor education your magazine has to offer. I see and read of wonderful adventures into the wild, both for hunters and the hiker, stories of nature, and the trials and tribulations of nature-vs-man, but most of all I see how a different part of this country views what I hold dear, that is, the outdoors. It is refreshing to have a publication in print that cares about our concerns as much as this one does. Thank you, Virginia Wildlife, for your efforts. This Nebraskan appreciates the caring attitude you employ in publishing this magazine. I only wish that the Nebraska counterpart of your magazine (Nebraskaland) was done with as much effort and pride. One last thing: Thanks, Dad for giving me this subscription. It was and still is a wonderful gift.

> Steve Carmichael Bellevue, Nebraska

Working Together

I was impressed with Virginia Shepherd's line "Greatness lay not in ourselves, but in how well we inspired others to take action," in her March 1989 editorial.

Today, the state of Virginia faces the potential loss of Shenandoah Valley's natural and cultural heritage. With residential and commercial development threatening our environment, the Shenandoah Valley Heritage Alliance seeks to bring together in a working coalition of concerned citizens and representatives from national, regional, and local public and private organizations that value the Shenandoah Valley's vanishing landscape.

Organized in 1988 by the National Parks and Conservation Association, the Alliance seeks to preserve important natural and cultural heritage when a specific resource is threatened. Each year the alliance will collectively focus on a select number of issues and seek to build coalitions and facilitate action on specific issues of concern to individual organizations. Currently, we are seeking to provide for the wise stewardship of land and water resources of the Shenandoah Valley through conducting an educational program in neighborhoods and schools fostering a community land ethic.

I invite you to write: NPCA/Shenanadoah Valley Heritage Alliance, Box 1000, Harpers Ferry, West Virginia, 25425.

> Bruce Craig National Parks and Conservation Association

# Alaskan Fish and Wildlife Restoration Fund Established

The National Fish and Wildlife Federation has announced that it is establishing a special fish and wildlife restoration fund to aid the rescue and recovery of fish, wildlife and plant resources impacted by the Valdez, Alaska oil spill. The Foundation will manage the fund, and monies will be disbursed in concert with and on the recommendations of officials from the United States Fish and Wildlife Service, the National Marine Fisheries Service, and the Alaska Fish and Game Commission.

Charles H. Collins, Executive Director of the Foundation, said that the fund was created in direct response to the great number of inquiries by the public expressing a desire to assist and contribute to wildlife recovery efforts. "People across the country have expressed an overwhelming concern and are willing to contribute to assist in the recovery of the vital fish, plant, and wildlife resources affected by this devastating tragedy in Alaska," Collins explained.

Contributions should be made payable to the National Fish and Wildlife Foundation and sent to: National Fish and Wildlife Foundation, "Alaskan Fish and Wildlife Restoration Fund," 18th and C Streets, NW, Room 2556,

Washington DC 20240.

The National Fish and Wildlife Foundation is a non-profit, charitable corporation, established by Congress in 1984. It is not an agency of the United States Government. Donations made to the Foundation are deductible as charitable contributions. In addition, the Foundation has the authority to receive matching funds from Congress.

The Foundation's goals are twofold. It encourages, accepts, and administers private gifts of property in connection with the activities of the U.S. Fish and Wildlife Service. In addition, the Foundation undertakes many activities which promote the conservation and management of this country's fish, wildlife, and plant resources for present and future generations of

Americans.

# Free Endangered Species Pamphlet Available

The U.S. Fish and Wildife Service has prepared a brief endangered species publication that explains the endangered species listing process, the need to preserve crucial habitat and the aim to restore threatened populations. For your free copy, write to: Consumer Information Center, Department 572V, Pueblo, Colorado 81009. □

# June Journal

# **Boating Accidents**

Boating is a fun sport for many people. However, in 1988, 24 Virginians lost their lives. Many of these tragedies could have been prevented.

Virginia's statistics show that most of these fatalities are caused by falls overboard or capsizings. In most of these accidents the victim was not wearing a Personal Flotation Device. The law requires that each boat have a PFD aboard for each person, but it does not require the PFD be worn. Thus, the obvious becomes tragically clear; PFD's will not work if they aren't worn.

Collisions with other boats was the main cause of injuries and property damage last year. The most often used excuse is: "I didn't see the other boat," however, "failure to keep a proper lookout" is the real reason for these collisions. The sad part of this is these accidents happen on clear days with unlimited visibility and in calm water. Exposure to the sun, motion, and glare may contribute to this lack of observation. Many of these accidents are also caused by having a few "too many" drinks. By automobile standards, a good many of these operators would be legally drunk. "Designated" boat operators would help this situation considerably.

Fires and explosions are another major cause of property damage and injuries. Leaky fuel lines are the culprit here. Your nose is the best check for this malady. Sniff the bilges carefully and be sure to run your blowers before starting the engine. Remember, a cup of gasoline has more explosive power than five sticks of dynamite.

You can easily reduce your chances of becoming a boating accident statistic by doing a few simple things. Wear your PFD while underway, stay low and don't stand up in a small tippy boat or canoe, and keep your craft in top flight mechanical condition. Here's to a season of safe boating!  $\square$ 



# Wind, Waves & Water

In this column I should like to ramble on a bit about some practical navigation. Many of us get all wrapped up in charts, compass, sextant, celestial navigation, etc., and things get so complicated that we tend to throw up happens, the boatman should lean back and put it all together in a practi-

Look around at the water and observe the currents caused by tide. gravitational flow and the wind. As the boat moves along, all of those things can be seen in relation to you and your vessel. On open waters, whitecaps will appear with winds at 10 to 12 knots. but on protected waters, such as rivers and lakes, it might take 20 knots or more. In order to calculate windspeed, it will be necessary to stop your vessel, otherwise the apparent wind is the result of the actual wind influenced by the motion of your boat. It is obvious that anything strong enough to be called a wind is going to influence your navigation because it can slow you down, speed you up or cause you to drift off course. The waves caused by the wind go downward, but depending upon shoreline barriers and influences, can vary by 20 degrees or more from the actual wind direction. The wind has more influence upon the action of the water if it blows for a longer time or over a longer distance. If the wind blows over a short distance over the water it is known to seamen

as a short "fetch." If it blows over a long uninterrupted distance it is a long fetch. The longer the fetch, the more influence the wind has upon the water.

When the wind gets up to 25 knots or more, you had better figure its influence on both your navigation and the safety of your trip. Remember, too, that you may be fishing or swimming in the lee of an island, promontory, or some other protective feature, and then, when it is time to go home. you come around to the windward side and find that wind has a force which will give you problems.

You can also take advantage of winds, current and tides to help get you where you want to go. Many rivers have tides so strong that when the tide is coming in, it completely reverses the natural gravitational flow of the our hands in disgust. When that river and if you cut off your engine or drop your sail, will propel you upstream at a speed of several knots per hour. Tides and currents, when going in a direction opposite to the wind, can create steep waves which will give your boat a good pounding.

When you observe the wind strength and direction, current, and tide, be sure to take them all into consideration if you are trying to get to some place on a compass heading. Let's say you want to get to a place on a distant shore and your compass heading is 100 degrees. Now you want to take wind and current plus tidal flow into consideration, but you don't know how much it is going to throw you off. If your calculations are wrong you will get to that distant shore, but not at the exact spot you wanted to reach. Now, do you turn north or south to reach it? A good trick is to make a "deliberate error" when you start out for that distant shore. Set your course for 110 degrees—a ten degree "error." That should bring you in at a spot well south of your destination. Now, there is only one way to turn north. Run along the coast until you reach your goal.—William Antozzi, Boating Safety Officer

# A Lesson in Teaching

When Henry Baskerville was just a young boy, his father told him to keep things simple. No matter what subject you are learning, break it down into the most basic elements and you will

always excel.

A Richmond native and President of Safaris Unlimited, Baskerville recently conducted a three-day seminar on "Teaching Teachers How to Teach Shotgun Shooting and Related Pleasures." The group consisted of five Hunter Education training sergeants, Captain Herb Foster, Hunter Education Coordinator, and Bill Christy, a nationally known shotgun shooting instructor currently under contract with L.L. Bean.

The first words to come out of Henry Baskerville's mouth raised a few eyebrows. He matter-of-factly stated. "If ever there was a rotten shot, it was me." It helps to realize that this statement was made in a room filled with more than 100 big game trophies from South Africa, New Zealand, Mexico, Spain, and several western states. He continued by saying that as a boy he was strong but uncoordinated. "The family always knew if anyone was going to turn over the milk reaching for the salt it was me," he said laughing. "But, even though I was a klutz, my father always encouraged me to shoot and to shoot for the fun of it."

It was this approach that Henry Baskerville so successfully teaches his students.

"First and foremost a student must believe in himself and learn to trust his own instincts," says Henry. "Self confidence is one of the most important keys to successful shotgun shooting."



Henry Baskerville, shooting instructor extraordinaire: photo by Herb Foster.

break a target the very first time. Then I make a big 'to-do' over it."

"See, it wasn't hard to hit the target, was it?" asked Henry of an apprehensive student. Then he turned to the others and said, "Wasn't that wonderful?" He's right, enthusiasm sells and it's contagious. "keep it simple and have fun. I can't repeat this enough," he emphasized.

Henry reveals with a grin that he often says he teaches children differently than adults. "But I really don't-I only give them one directive at a time, too." He stresses that you can't com-Henry stresses that when he takes a plicate your student's thinking. "Infornew student out on the range he mation overload" hampers perforalways starts with an "easy shot." "In mance. You must teach the student to the beginning," he says, "you as a concentrate instantly and completely teacher are always fighting an enemy, on the target. "You will find," says uptightness, so I try to have my client Henry, "that in order to progress you

must sometimes regress and go back to the drawing board."

He goes on to say that a teacher must become an extension of his student's feelings and the situation. This is certainly true in Henry Baskerville's case. He clearly demonstrated, time and time again, that a good teacher can instinctively feel the problems at the very moment they are happening. His teaching approach is kind and supportive, yet he makes his students stand on their own two feet. He guides and directs in such a subtle manner that a student doesn't even realize he is really progressing. And, the progression rate is incredible. By the end of the second day of the seminar, Henry had his "Magnificent Seven" (as he began to call his students) hitting targets with their guns held upside down. (No, that's not a typo, they were shooting with their guns held upside down.) "It's just mind over matter," smiles Henry. In just three days, Henry Baskerville turned the Game Department's staff hunter education instructors into crack shots. In that time frame these seven men shot approximately 3,200 shells and broke somewhere between 90-95% of the targets thrown.

Henry says that, "Knowledge is understanding." He feels that you cannot teach a sport until you can identify with the student. And he stresses that is it important to convince each and every student that he or she is the best student you've ever had. He says smiling, "The greatest gift of all is that every time I teach, I learn something new."

Thank you, Mr. Baskerville.

"Just call me, 'Henry."

Calling him "One of a kind" is more like it.

Note: Special thanks from the Game Department goes to Dr. Richard LeHew for kindly offering us the use of his farm in Powhatan County for this illuminating three-day seminar. 

□

# June Journal

# Young of the Year

The anticipation and excitement of the first warm days of spring, the spring rains, the spawning runs, bird migrations and courtship rituals are over with. The month of June marks the end of spring and the beginning of summer. The mild, comfortable breezes of spring, which were still occasionally laced with refreshing northerly breezes of a dying winter season begin to dissipate. Temperatures climb as the sun's life-giving rays accelerate the growth of plants and trees.

By June, most trees, shrubs and other foliage are well along in their growth. Various types and colors of wildflowers adorn woods and fields. The catalpa will bloom with the first hot, humid days. As kids in Milwaukee, my friends and I used to call their long seed pods "Indian Pipes." We'd gather them in fall and make believe we were smoking them. In the dark woodlands, a real Indian pipe, by name, grows. It's a white plant that lacks chlorophyll, much like a mushroom. Along muddy waterways, arrowarum shoots are a foot or more in height, while the new green cattail growths have begun to engulf the brittle, tan stalks of last year.

With the exception of certain sunfish species, most fish have completed their spawning activities, and for a brief time, roam the shorelines feeding heavily until warming waters and increased weed growths forces them to their normal summer haunts—usually reefs, dropoffs and other structure. The weedy shorelines show evidence of a successful spawning season as tiny fry dart about in the shallows.

Somewhere in the adjacent marsh, a marsh wren sits atop an old cattail amid the new green shoots and sings its scratchy song. Carp splash and boil in the weeds of the shallows as they spawn. Coots and teal cruise leisurely

# Family Outdoors

by Spike Knuth



Brown thrashers; photo by Jack R. Colbert.

in the marsh sloughs while a wood duck drake loafs on a log. At a wooded edge of the marsh, a brood of fluffy wood duck ducklings tumble earthward from their tree hole nest some 40 feet up. Bouncing like little balls of cotton, and somehow never getting hurt, they join the hen who leads the downy young quickly to the security of the water.

The appearance of the young-ofthe-year fish, birds and other wild creatures is probably the most noteworthy event in the month of June. After all, it is this increase that will assure the continuation of each kind. Unfortunately, due to the destruction of much of our environment and natural habitat, the populations as well as the yearly increases of many beneficial creatures—especially in the bird world—are diminishing. Available habitat is "restocked" naturally each year. But that habitat is dwindling due to the construction of roads, shopping centers, subdivisions, industries and the resultant pollution and siltation from each.

Despite our abuse and misuse of the land, it is still unbelievably productive. Warming temperatures and almost fully developed foliages now host abundant varieties and numbers of insects for the diets of young, growing birds. Parent birds fly back and forth, busily gathering and delivering food for their growing babies, or leading them through woodlands, along marsh sloughs, lakeshores and across roads.

While songbirds, birds of prey, and many water and marsh birds have young that are totally helpless and dependent on their parents, certain young are precocial. That is, they are able to run about and fend somewhat for themselves as soon as their natal down is dry. These include sandpipers, plovers, snipe, waterfowl, grouse, pheasants, quail and turkeys. Many a trout fisherman has surprised a hen grouse with her brood, watching the babies freeze and hide in some vegetation while mamma went into her broken wing act in an attempt to draw the intruder away.

Everywhere on a June morning, it seems that parent birds are feeding, leading and protecting their young, On a misty morning, a blue-winged teal hen leads her five downy young from their grassy birthplace to the safety of the water. A hen quail and her brood run the gauntlet of automobiles as she escorts her valuable treasures across a highway.

In June, the world of wildlife, the whole outdoor scene is one of great activity. The methodical "business" of reproducing "after their kind" is a top priority for breeding wildlife. It is a time of the young-of-the-year. □

# Honeysuckle

It's terrible to grow up and find out that the plant that has sweetened all your summer afternoons is a pest. It's true, of course. The imported Japanese honeysuckle has rampaged through the Southeast like an outlaw and strangled thousands of acres of native vegetation in its path. But it's not the only honeysuckle worthy of note in Virginia, and it's not without virtues, whatever its vices.

Japanese honevsuckle was once planted along highways to control erosion. That it did, but it also spread by both rooting stolons and seeds carried by birds, and soon it was out of control. Anyone who has started pulling a rooted honeysuckle vine in one spot only to find himself still pulling 15 feet away knows how hard it is to eradicate. Tree trunks contorted by honeysuckle vines also testify to its power (and explain its other common name, woodbine). But, although the native vegetation it strangled might well have served wildlife better, Japanese honeysuckle has, by its very abundance, been useful to wildlife. Its tangled vines provide both nesting and protective cover, and its semi-evergreen leaves and black berries provide food. especially during critical winter months.

It would also be hard to imagine a summer without the scent of honeysuckle in the air. Japanese honeysuckle blossoms are usually held on the stems in pairs. They are creamy white at first, deepening to a buttery yellow as they age. It's these two-lipped tubular flowers that hold the sweet nectar responsible for their fragrance and their name. Honeysuckle sipping—sipping the sweet nectar from the base of the flower—was as common a pastime as jumping rope when I was a child, but don't assume it's a part of every child's repertoire now. On a recent field trip with teenagers, I was startled to discover how many of them had never

# Habitat

by Nancy Hugo



Trumpet honeysuckle (Lonicera sepervirens); photo by Hal Horwitz.

sipped honeysuckle nectar. Lest this become a lost art, resolve today to show a child how to tear the base off the honeysuckle blossoms, pull the pistil down until a drop of nectar comes out with it, and sip.

In addition to Japanese honeysuckle. Virginia has two other naturalized species of exotic honeysuckle, and four native species. One of the most sore throats and coughs. beautiful of our native honeysuckles is coral honeysuckle. It has red tubular flowers with yellow interiors held in whorled clusters at the ends of the stems. Its flowers are not fragrant—a strike against them, but they're beloved by hummingbirds—a strong point in their favor. Coral honeysuckle is also much easier to control than Japanese honeysuckle and looks as beautiful as it does winding its way through hedgerow.

some parts of the South, but it loses its leaves in my neighborhood. Its foliage is blue-green with lighter undersides, and its upper leaves are fused, making it look as if the stems pierce through them. Indians once used these leaves in an herbal tobacco smoked to treat asthma, and they used the vine's scarlet berries in a decoction used to treat

Coral honeysuckle likes full sun Lonicera sempervirens, the trumpet or and will thrive in almost any soil, although it prefers acid soils enriched with leaf mold. You can propagate it from seeds collected in the wild, root cuttings taken from green wood, or buy nursery grown plants. However, be sure you don't buy Japanese honeysuckle. One enterprising Ashland horticulturist once sold Japanese honeysuckle to unsuspecting customers all growing on a backyard fence or trellis over the country by listing it under its botanical name, Lonicera japonica. These plants are still laughing and leap-Lonicera sempervirens is evergreen in ing from the tops of fence posts.

# Virginia's Wildlife

Katvdids are the loudmouths of the insect world. Or maybe I should say the loudwings. Like crickets, katydids rub their front wings together to make the sounds that fill our late summer and fall nights. We're so used to the sound, we hardly hear it—it's like background music, but if you can focus on the songs, you'll hear the roar of romance among the katydids.

There are thousands of species of katydids, and each one has a different call. The true katydid, Pterophllya camellifolia, is the one responsible for the name because at least some people can hear "Katy did, Katy didn't" in its call. I can't. To me, the true katydid's call sounds like sandpaper being rubbed back and forth. Or maybe a saw. Descriptions of the calls of other species testify to man's inability to put insect sound to word. "Kizizik," "bzrwi," and "i-tsip-i-tsip-i-tsip" are among my favorite spellings of different katydid calls. A good entomologist can tell the kaytdids apart by their songs the way an ornithologist can his birds, but the best I'm hoping for is to be able to tell a katydid from a locust, a cricket, and a cicada.

A place to start is to listen for the difference between the sounds of the crickets and the grasshoppers (a katydid is a long-horned grasshopper, a locust is a short-horned grasshopper). Cricket calls are musical and have pitch. Think of them as trills. Short and long horned grasshoppers make sounds that are mechanical and have no pitch. Think of them as rasps. "Like a toothed comb over taut string" and "like a stiff quill drawn across a coarse file" are frequent descriptions of katydid calls. The katydid makes this sound-which scientists call a stridulation—by rubbing the scraperlike apparatus on his right front wing over a file-like apparatus on the underside of his left, and he can change the sound of his call by changing the pressure, rate, and distance of the "rub."

# The Katydid

by Nancy Hugo photo by Lloyd B. Hill

Katydids often sing all night—from dusk to dawn—and during a summer the katydid may scrape its wings together 50 million times. In Virginia, the katydids usually start singing in late July or August and continue until the October frosts. They're so late starting because it's only the adults who sing, and until that time their wings aren't fully developed.

Although female katydids occasionally make sounds, it is primarily the songs of male katydids we hear on summer nights. The purpose of the song is to attract females of the same species. In the words of one plain spoken expert, "it requires much less energy than chasing after them all night." The calls occur during the night instead of the day because during the day the song would attract bird

predators as well as mates.

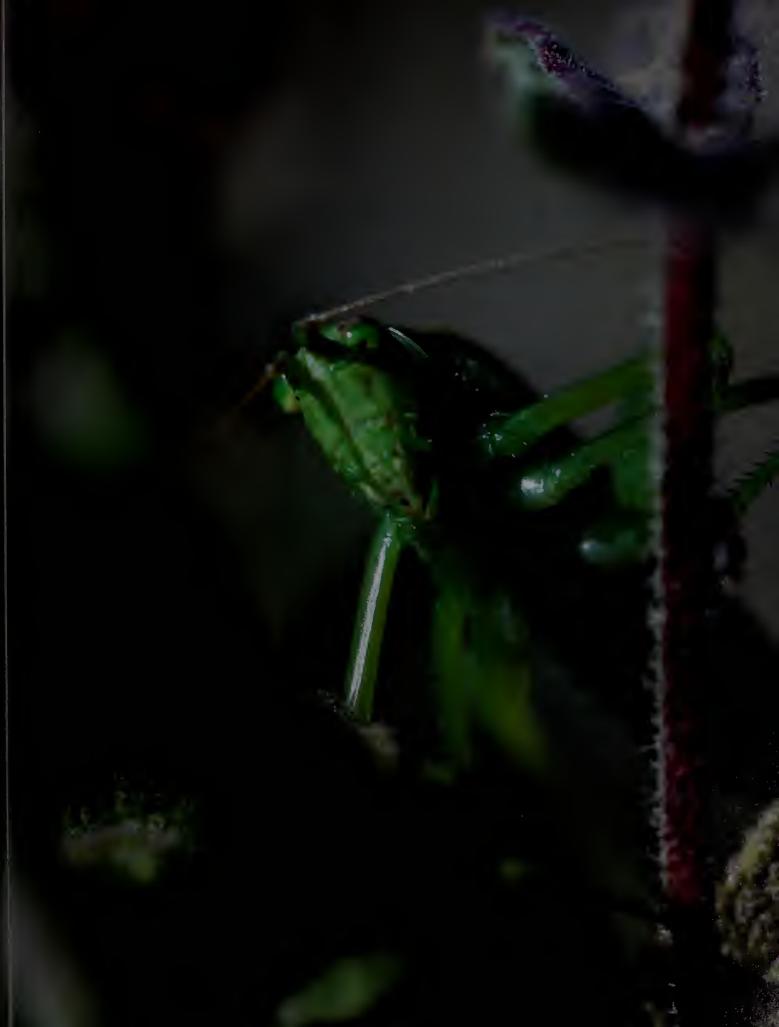
Katydids are more often heard than seen, but they're easy to recognize if you do see one. Their bodies are bright green—the color of the leaves they eat, and their shape reminds me of a Ford Taurus station wagon. They're roughly oblong, about ½ to 3" long, and have long threadlike anten- count the number of rasps per minute, nae. The females have flat, swordlike subtract 19, divide by three, then add ovipositors that they use to deposit 60. No joke. If, on a summer evening eggs in leaves, bark, or in the stems of many months from now, you can both the young undergo five molts (sheds remember this formula, you'll be cool of skin) before reaching maturity. no matter what the temperature.

(This is another distinguishing characteristic between crickets and grasshoppers. Crickets undergo 12 molts; grasshoppers undergo only 5).

Most katydids live in grasses, shrubs or trees, and the true katydid is almost exclusively arboreal. Most species are shy—you won't find them hopping around dirt roads on summer days like the short-horned grasshoppers, and few actually fly. Instead, they fall like flying squirrels from one branch to another.

Females hear the male's songs through "ears" on their front legs, and they instinctively follow the song to their source. While still singing, the male presents his arched back to the female, and she climbs aboard. During the act of copulation, the male falls silent and contracts his abdominal muscles to produce a package of sperm which he inserts into the female's genital opening. He also squeezes a large white mass of protein-rich material out of his abdomen, and after the pair uncouples, the female reaches around and eats this material which will nourish her eggs.

Both katydid calls and cricket calls are said to be useful in estimating the outdoor temperature. That they speed up in hot weather, slow down in cool weather is certainly true, but how accurate some of the formulas are for determining the temperature in degrees based on the speed of the insects' calls, you'll have to decide for yourself. To estimate the temperature in degrees Farenheit based on the snowy tree cricket's call, you're supposed to count the number of chirps in 15 seconds and add it to 37. To estimate the temperature in degrees Farenheit based on a katydid's call, you're supposed to twigs. The eggs hatch in the spring and accurately count katydid rasps and





National Safe Boating Week June 4-10, 1989